



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/693,610 | 10/27/2003 | Roger R. Smith | 050377-0306115 | 6473 |
| 909 | 7590 | 11/17/2005 | EXAMINER | |
| PILLSBURY WINTHROP SHAW PITTMAN, LLP | | | TALBOT, MICHAEL | |
| P.O. BOX 10500 | | | ART UNIT | |
| MCLEAN, VA 22102 | | | PAPER NUMBER | |

3722

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,610

Applicant(s)

SMITH, ROGER R.

Examiner

Michael W. Talbot

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2005 and 26 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-24 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>05/05/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The objection to the drawings has been withdrawn due to Applicant's amendment filed on 12 August 2005 in which the drawings received are deemed acceptable.
2. However a new objection to the drawings is being presented herein resulting from the newly added claims 29 and 30.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "gripping position comprises an expanded position, and wherein the released position comprises a contracted position" recited in claim 29 and the "push-out-to-close configuration" recited in claim 30 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6,8-11,14-19,21-24,27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Elbe '182. Elbe '182 shows in Figures 1 and 2 a force limiting workpiece holding device having a spindle (b), a closer (b¹,b²) that applies a force, a workpiece holder (collet) slidably mountable to the spindle including a plurality of circumferentially-spaced gripping segments (D) and a force limiting coupling structure (A,a¹,a⁷) including a biasing structure (a⁷) having a spring force positioned between the workpiece holder and the closer such that the force applied by the closer is transferred to the workpiece holder through the biasing structure (page 2, lines 32-49) wherein the force limiting coupling structure limits a resultant force to the spring force of the biasing structure. Elbe '182 further shows the workpiece holder including outwardly facing cam surfaces (d1) that slidably engage inwardly facing cam surfaces (f) provided on a tapered cap (F) mounted to the spindle. Elbe '182 further shows the closer including a draw bar (b¹) that interconnects the closer and the coupling structure. Elbe '182 further shows the coupling structure having an elongated stem having one end (a²) mounted to the workpiece holder and an opposite end coupled to a spacer (a⁴) providing a first support surface, the coupler (A) providing a second support surface (a⁸) slidably mounted to the elongated stem between the spacer and the workpiece holder, and the biasing structure positioned between the spacer and the workpiece holder such that the ends rest on the first and second support surfaces whereby a force applied by the closer is transferred from the draw bar to the coupler, then from the coupler through the biasing structure and to the spacer, and finally

Art Unit: 3722

from the spacer to the stem and workpiece holder (page 2, lines 12-56). Elbe '182 further shows the coupler having a stroke length with respect to the elongated stem that is sufficiently larger than a stroke length of the closer (Fig. 1). Elbe '182 further shows the coupling structure including a fastener (a⁵) threadably engaged with the elongated stem to support the spacer and to adjust the position of the spacer thereby pretensioning the biasing structure.

Claims 1-8,14-21 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Curtis '855. Curtis '855 shows in Figure 2 a force limiting workpiece holding device having a spindle (8), a hydraulic closer (62 and col. 1, lines 40-41) that applies a force, a workpiece holder (32) slidably mountable to the spindle including a plurality of circumferentially-spaced gripping segments (col. 3, lines 34-37) and a force limiting coupling structure (14) including a biasing structure (78,86) having a spring force positioned between the workpiece holder and the closer such that the force applied by the closer is transferred to the workpiece holder through the biasing structure (via the coupling structure) wherein the force limiting coupling structure limits a resultant force to the spring force of the biasing structure. Curtis '855 further shows the workpiece holder including outwardly facing cam surfaces (40) that slidably engage inwardly facing cam surfaces (42) provided on a tapered cap (4) mounted to the spindle. Curtis '855 further shows the closer including a draw bar (62) that interconnects the closer and the coupling structure. Curtis '855 shows a configuration wherein the gripping position comprises an expanded position and the releases position comprises a contracted position thus having a push-out-to-close configuration (col.1, lines 29-50 and col. 5, lines 26-30).

Claims 1-6,8,14-19,21,27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson, III '095. Atkinson, III '095 shows in Figures 1-3 a force limiting workpiece holding device having a spindle (10), a closer (col. 2, lines 65-68) that applies a force, a workpiece holder (C) slidably mountable to the spindle including a plurality of

Art Unit: 3722

circumferentially-spaced gripping segments and a force limiting coupling structure (34,38) including a biasing structure (40) having a spring force positioned between the workpiece holder and the closer such that the force applied by the closer is transferred to the workpiece holder through the biasing structure (via the coupling structure) wherein the force limiting coupling structure limits a resultant force to the spring force of the biasing structure. Atkinson, III '095 further shows the workpiece holder including outwardly facing cam surfaces that slidably engage inwardly facing cam surfaces (18) provided on a tapered cap (14) mounted to the spindle. Atkinson, III '095 further shows the closer including a draw bar (48) that interconnects the closer and the coupling structure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson, III '095 in view of Curtis '855. Atkinson, III '095 lacks a specific reference to the conventional collet actuating mechanism, i.e. closer, being of hydraulic type. Curtis '855 describes in col. 1, lines 40-41 a hydraulically operated piston to actuate the draw bar. In view of this teaching of Curtis '855, it is considered to have been obvious to include the referenced hydraulic actuating means of Curtis '855 to be encompassed within the known conventional collet actuating means referenced by Atkinson, III '095.

Response to Arguments

5. Applicant's arguments filed 12 August 2005 and 26 August 2005 have been fully considered but they are not persuasive.

Art Unit: 3722

For each of the above references, the biasing member is one of a chain of members used in combination to transfer a force from the closer member to move the gripping segments of the workpiece holder to an expanded or retracted position. Furthermore, in each case the biasing member limits the resultant force reaching the workpiece holder through its internal elastic/spring force.

Allowable Subject Matter

6. Claims 12,13,25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

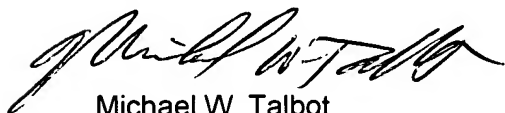
8. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's

Art Unit: 3722

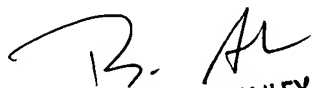
office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mr. Boyer D. Ashley, may be reached at 571-272-4502.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account.

Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



Michael W. Talbot
Examiner
Art Unit 3722
11 November 2005



BOYER D. ASHLEY
PRIMARY EXAMINER

ENTER 11/11/05 MWP

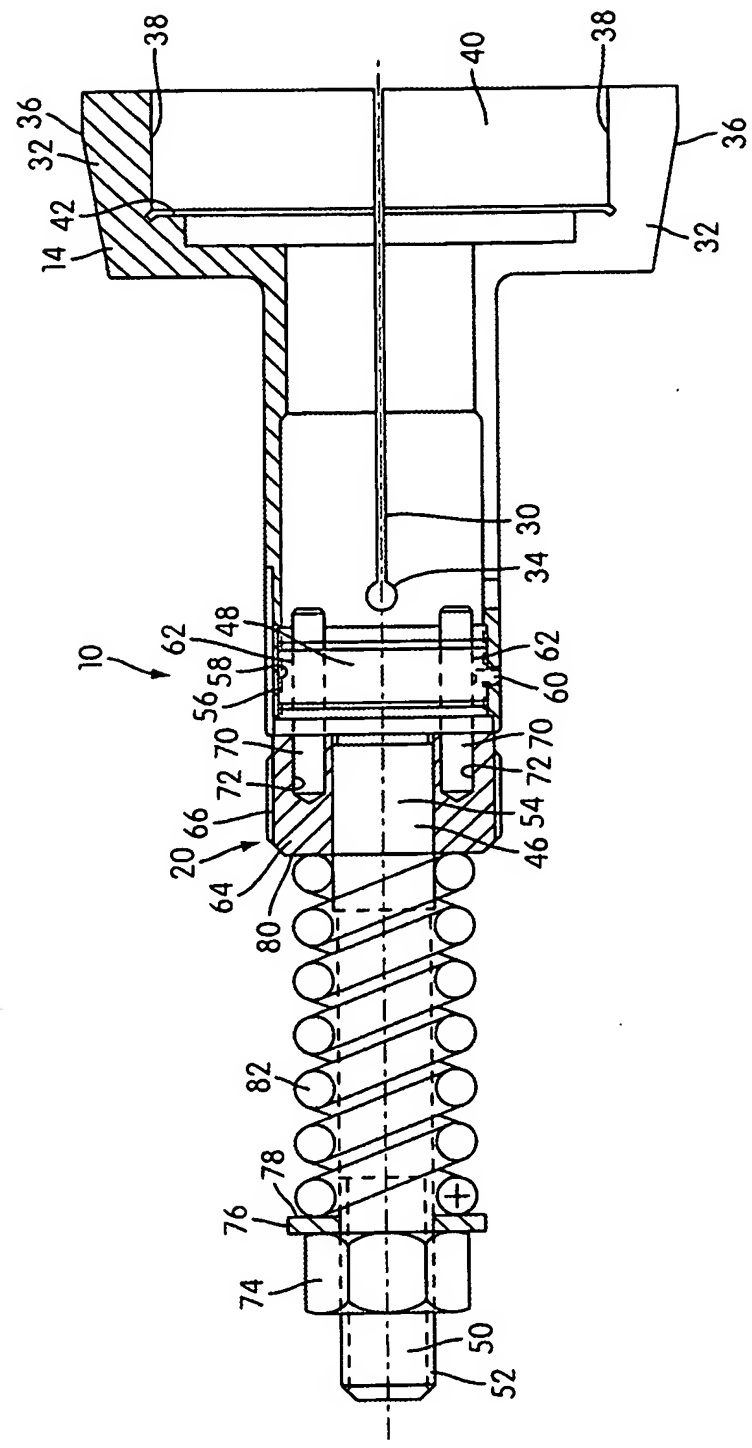


FIG. 1

ENTER 11/11/05 *dwj*

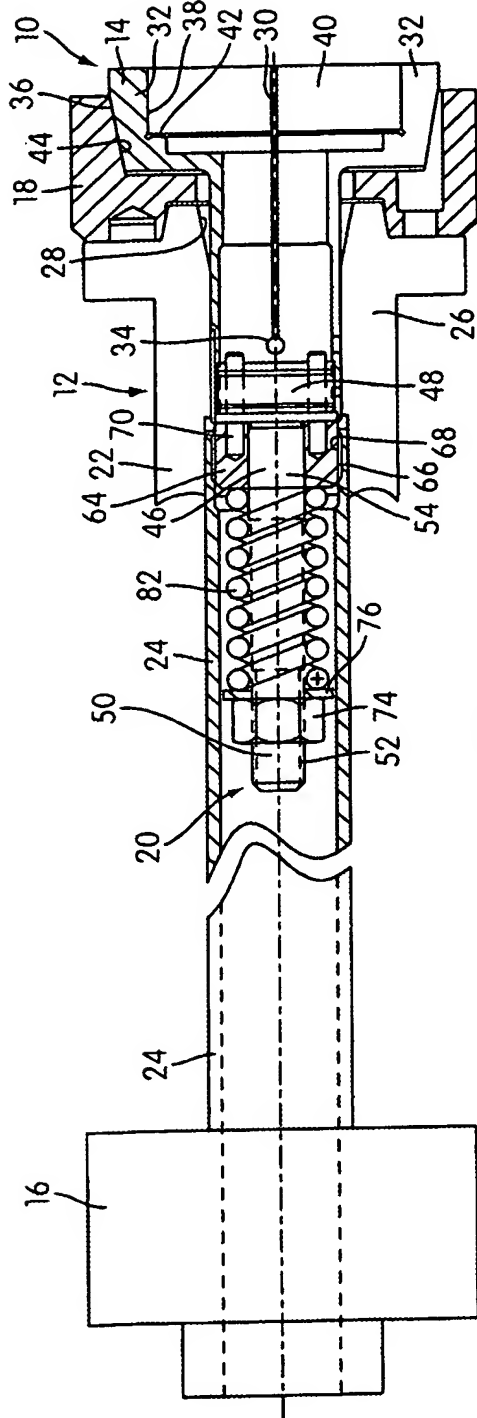


FIG. 2

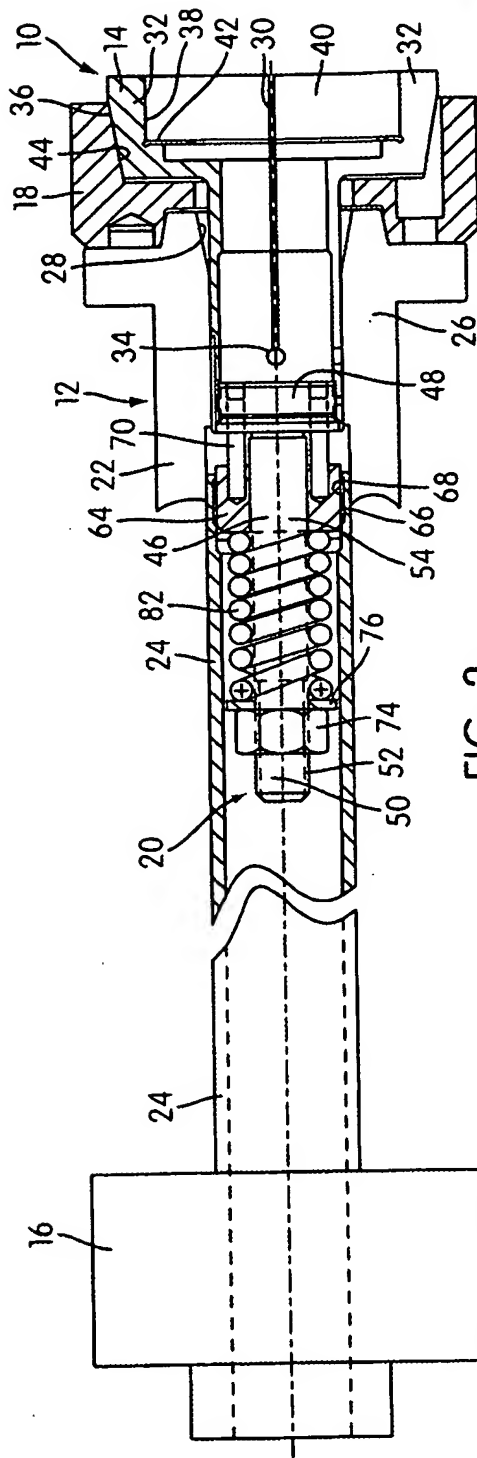


FIG. 3



FIG. 4